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Post-disaster Management of Human Resources: Learning From an Extended Crisis

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Abstract

Disasters are rare events with major consequences; yet comparatively little is known about managing employee needs in disaster situations. Based on case studies of four organisations following the devastating earthquakes of 2010 - 2011 in Christchurch, New Zealand, this paper presents a framework using redefined notions of employee needs and expectations, and charting the ways in which these influence organisational recovery and performance. Analysis of in-depth interview data from 47 respondents in four organisations highlighted the evolving nature of employee needs and the crucial role of middle management leadership in mitigating the effects of disasters. The findings have counterintuitive implications for human resource functions in a disaster, suggesting that organisational justice forms a central framework for managing organisational responses to support and engage employees for promoting business recovery.

About the Resilient Organisations Research Programme

“Building more resilient organisations, able to survive and thrive in a world of uncertainty, through research and practice”

We live in an increasingly complex world dealing with a broad spectrum of crises arising from both natural and man-made causes. Resilient organisations are those that are able to survive and thrive in this world of uncertainty.

Who we are:

The Resilient Organisations Research Group (ResOrgs) is a multi-disciplinary team of over twenty researchers and practitioners that is New Zealand based and with global reach. A collaboration between top New Zealand research Universities and key industry players, including the University of Canterbury and the University of Auckland, ResOrgs is funded by the Ministry for Science and Innovation through the Natural Hazards Research Platform and supported by a diverse group of industry partners and advisors. The research group represents a synthesis of engineering disciplines and business leadership aimed at transforming NZ organisations into those that both survive major events and thrive in the aftermath.

We are committed to making New Zealand organisations more resilient in the face of major hazards in the natural, built and economic environments. Resilient organisations are able to rebound from disaster and find opportunity in times of distress. They are better employers, contribute to community resilience and foster a culture of self-reliance and effective collaboration.

What we do:

The ResOrgs programme of public good research is aimed at effective capability building through research activities with significant impacts on policy and practice. Activities and outputs of the group, in existence since 2004, include informing and focusing debate in areas such as Civil Defence Emergency Management, post-disaster recovery, and the resilience of critical infrastructure sectors, in addition to core activities in relation to organisation resilience capability building and benchmarking. We have produced practical frameworks and guides and helped organisations to develop and implement practical resilience strategies suitable to their environment.

Why we do it:

In an increasingly volatile and uncertain world, one of the greatest assets an organisation can have is the agility to survive unexpected crisis and to find opportunity to thrive in the face of potentially terminal events. We believe such resilience makes the most of the human capital that characterises the modern organisation and offers one of the greatest prospects for differentiating the successful organisation on the world stage. This resilience is typified by 20/20 situation awareness, effective vulnerability management, agile adaptive capacity and world class organisational culture and leadership. More resilient organisations lead to more resilient communities and provide the honed human capital to address some of our most intractable societal challenges.

For more information see our website: www.resorgs.org.nz

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Introduction

Disasters present major challenges for organisations, requiring them to function in an ambiguous environment, lacking many of their usual resources (Norris *et al.* 2008). For employees, disasters can result in loss of morale, motivation and engagement with work (Pearson and Clair 1998). In normal day-to-day circumstances, human resources staff seek to develop practices that satisfy employee needs and achieve organisational outcomes, using approaches that foster equity and standardisation (Marescaux *et al.* 2012). A disaster, however, presents a new situation where those approaches must be significantly redefined. The extent to which human resource staff are able to do this can significantly influence organizational outcomes (Iverson 1999; Jiang *et al.* 2012; Wright and McMahan 1992). Despite this, comparatively little is known about how employees perceive and respond to disasters since they are rare events.

Based on case studies of four organisations in the aftermath of the devastating earthquakes of 2010 - 2011 in Christchurch, New Zealand, this paper presents a framework to understand and manage employee needs and expectations. Analysis of in-depth interview data from 47 respondents in the four organisations suggests that effective management of disaster involves: (a) addressing basic human needs immediately following a disaster; (b) identifying the changing and relative nature of needs in the recovery phase; (c) acknowledging time-related changes in well-being, and (d) providing leadership through supervisors. The remainder of this paper is structured as follows. An overview of the literature relating managing after a disaster is presented, followed by an outline of the context of the present research and the research design. We then discuss the research findings and main themes identified, as well as the implications for human resource practitioners.

Understanding Disasters and their Management

Sudden-onset disasters place major demands on organizations, requiring them to respond rapidly, adapting to an unpredictable, fast-changing, and uncertain environment. Organisations can find themselves suddenly moved out of their normal operating environment by a broad range of unexpected contingencies including natural disasters such as, floods, earthquakes, as well as human-made disasters including large scale industrial accidents, episodes of mass violence and terrorism. A sudden-onset disaster may constitute an 'organizational crisis', defined by Pearson and Clair (1988: p. 60) as "a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly."

The extant literature on organisations has explored a number of aspects of organisations' responses to disasters or crises, including the interpretation of crisis events (Dutton and Jackson 1987; Maitlis and Sonenshein 2010; Weick 1993), organizational learning (Christianson et al. 2009; Lampel et al. 2009), communication management (e.g. Manoj and Baker 2007; Palttala et al. 2012; Quarantelli 1988), framing processes and cognitive reactions (Brockner and James 2008; Starbuck 2009), decision making processes (e.g. Anderson 1983; Smart and Vertinsky 1977), and the role of leadership in the context of crisis (e.g. James and Wooten 2010; Littlefield and Quenette 2007; Zhang et al. 2012).

Typically, there are three phases to a disaster: (1) pre-disaster, (2) disaster, which is immediately after the disaster, and (3) post-disaster, which is a period of positive recovery to a pre-event state or a new altered state (Lettieri et al. 2009). The pre-disaster phase is characterized by mitigation and preparedness, typically involving hazard assessment, vulnerability and risk reduction with processes and actions that prepare organizational members for crisis and post-crisis activities. In contrast the disaster and post-disaster stages involve response and recovery processes (Lettieri et al. 2009).

Executive perceptions of disasters and their associated risks influence the extent to which an organization engages in preparedness (Nystrom and Starbuck Spring 1984). Sense making and the mental models of managers determine their emphasis on mitigation and preparedness (Weick et al. 2005). Managers are subject to cognitive biases such as overconfidence, illusion of control and law of small numbers, which lead to lowered risk perceptions (Simon et al. March 2000). These biases can also lead to policy failures, inadequate resource allocations for safety,

communication failures, misperceptions of the extent and nature of hazards, and inadequate emergency plans. In addition, pressure from specific stakeholders and cost pressures can curtail preparation for adverse events, leaving an organization without adequate practices and processes (Shrivastava et al. 1988). Both mitigation and preparedness processes are influenced by the cognitive biases of organizational leaders and the prevailing organizational culture (Pauchant and Mitroff 1992). Similarly, cognitive limitations and decision making under stressful conditions can impair the effectiveness of response activities in the immediate aftermath of a disaster. Stress, surprise and the imperative for a quick response can lead to dysfunctional responses (Smart and Vertinsky 1977). Impaired cognitive, emotional and behavioural responses of organizational members, coupled with an eroded social structure, can make it hard to respond effectively to the disaster (Pearson and Clair 1998).

While topics such as post-traumatic stress disorder are well documented, comparatively less attention has been paid to exploring the implications for employing organisations in terms of understanding and addressing post-disaster employee needs (Harvey and Haines 2005; Pearson and Clair 1998). Disasters can lead to injuries, bereavement, loss of dwellings, and an uncertain future (Byron and Peterson 2002), and victims can exhibit a range of negative psychological reactions, including emotional numbing, social withdrawal, irritability, fearfulness, depression, sleep disturbances and marital problems (Byron and Peterson 2002; Tucker et al. 2000; Ursano et al. 1995). The extent of employee vulnerability can vary depending on the characteristics of a person or group in terms of their capacity to anticipate, cope with, resist, and recover from the impact of a disaster (Paton 1999). Sanchez et al. (1995) suggest for example, that employees' need for support is likely to change over the course of a disaster. There are clear indications that organisations need to consider individuals' perceptions after a disaster, in order to assess how the experience has affected individuals' work capacity and commitment, and to identify appropriate organisational responses (Pearson and Clair 1998).

Liou and Lin's (2008) research into terrorist crises highlights the critical role that the human resource function can play during emergency situations, through actions such as communicating, adjusting employee policies and benefits, deploying counsellors, and generally working with management, employees and families to cope with the intense stress. While employee assistance programs can be effective in assisting with the emotional grief and sense of loss, workers may first need assistance with basic needs such as food and shelter. Decisions made in the aftermath of a disaster,

especially poorly administered human resource practices, can result in perceptions of inequity or unfair treatment, and affect employees' subsequent work attitudes, job satisfaction, and organisational commitment (Wooten and James 2008)

In summary, it seems that little is known about the crucial issues associated with identifying and managing specific employee perceptions and needs following a disaster. To address this gap, this paper examines disaster response from an employee perspective by asking: (a) what do employees need immediately after a disaster, (b) how do these needs evolve as events unfold after a disaster, and, (c) what do employees expect of their employers in terms of meeting their needs following a major disaster? In the following section, we outline the context of the study.

Contextual Background

Christchurch, a New Zealand city with a population of approximately 400,000, was struck by powerful earthquakes between September 2010 and January 2012. The first major event in September 2010 was a magnitude 7.1 on the Richter scale. A subsequent magnitude 6.3 earthquake in February 2011 proved destructive and deadly, resulting in 185 deaths and widespread damage to water supplies, roads, sewerage and major power -lines. Over 100,000 houses were damaged while many thousands of needed demolition. The total cost to insurers of rebuilding the city has been estimated at NZ\$ 20–30 billion (English 2011).

A distinctive feature of this disaster was its extended nature with seismic activity continuing for many months. Almost 12,000 aftershocks were recorded from September 2010 – September 2012; including 52 major aftershocks of magnitude 5 or above. Further major events caused further widespread damage, liquefaction and infrastructure loss. In addition, the psychological effects significantly affected organizations, placing significant stress on employees, interrupting work days, and challenging both individual and organizational resilience.

For businesses and residents, the full consequences of the earthquakes continued to unfold over the following months. The city had no central business district with a large proportion of the buildings demolished, while ongoing engineering inspections led to the closure of an increasing number of buildings throughout the city. The city's residents dealt with complicated, prolonged insurance and engineering issues that significantly delayed the repair of homes and the rebuild of the city; large

numbers of residents were required to relocate as whole suburbs were abandoned due to land damage. The city's population declined while reports highlighted increasing mental health challenges for the population (Carville 2013; Dorahy and Kannis-Dymand 2012). This overall context therefore constituted an extreme challenge for organizations as they attempted to maintain operational viability in the wake of the disasters.

The Christchurch earthquakes matched all six of the criteria for an organizational crisis, as an environmental event that 1) has high ambiguity with unknown causes and effects; 2) has a low probability of reoccurring; 3) is unusual and unfamiliar; 4) requires a rapid response; 5) poses a serious threat to the survival of the organisation and its stakeholders; and 6) presents a dilemma necessitating a decision that will result in positive and/or negative change (Sayegh et al. 2004). The setting provided an ideal contextual for researching the management of employees in a crisis.

Research Design

As the study focused on evolving needs and how employees think and feel in the aftermath of a disaster (Langley, 1999), an inductive qualitative research design utilising semi-structured interviews was employed (Huy, 2012; Miles & Huberman, 1994). A total of 47 interviews were conducted across four large organisations in Christchurch (see Table 1) in late 2011. Convenience and purposive sampling (Miles & Huberman, 1994; Maxwell, 1997) approaches were used, with respondents being selected based on their willingness to be interviewed and the need to fulfil a range of demographic characteristics such as age, position in organization, length of service, and the degree of impact on personal situation from the earthquakes. Respondents were asked to describe: (a) their experiences during and subsequent to the February 2011 earthquake; (b) their subsequent experiences and needs, and (c) their experience of the nature of assistance and support they received from their managers and the organization. Interviews ranged in duration from 25-92 minutes and were recorded and transcribed verbatim resulting in 647 pages of text (Charmaz, 2006; Corbin & Strauss, 2008). The research design and data collection methods complied with the requirements of the Human Ethics Committee of the University of Canterbury.

NVivo software was used to assist in coding the transcripts. Employee responses were coded and these codes were combined to form themes (Auerbach & Silverstein, 2003; Boyatzis, 1998; Ryan, 2003; Saldana, 2011).

Table 1: Description of Organisations used for data Collection

<i>Sector</i>	<i>Ownership</i>	<i>Number of Employees</i>	<i>Nature of operations post-earthquake</i>	<i>Number of interviews conducted</i>
Health	Public	1000+	Essential service	9
Banking	Private	500	Non-essential service	14
Transportation	Public	289	Essential service	12
Technology	Private	930	Non-essential service	12

Findings

The findings revealed four themes relating to employee needs and expectations. These were; (a) addressing basic human needs immediately following a disaster; (b) the changing and relative nature of needs; (c) time-related changes in well-being; (d) the leadership behaviour of supervisors. These themes are discussed in detail below.

(i) Addressing Basic Human Needs

In our study, the immediate needs occurred in the initial crisis phase that occurred in the first hours of the disaster. These needs were centred on physical and psychological safety, communication with partners and family, and necessities such as food, shelter, and water. An initial issue concerned the evacuation of buildings and accounting for employees. Although organisations had evacuation plans, the normal fire-safety assembly points near buildings were often unsuitable for seismic disasters due to the risk of falling debris during aftershocks. Throughout the city there were many collapsed buildings and long lists of missing persons. Organisations, and particularly human resources staff, discovered the need for

readily accessible, up-to-date staff lists and emergency contact lists. Systems for employees to record their movements off-site, and for staff and visitors to sign in and out of the premises, took on a new importance. One manager spoke of his experience trying to locate colleagues immediately after the earthquake:

“...the very first question is always around you know, ‘Is everyone okay?’ and then you move into a case of, ‘Right, the people that aren’t here.’ So in February we couldn’t find someone and we were really concerned and that was number one on the priority as to where this particular person was and what he had done is he was heading either home or to somewhere in the campus and he raced home, but he didn’t tell anyone and so there was a lot of work trying to find that person.”

Employees who were away from the workplace at the time of the disaster expected to be contacted by their employer. Lack of contact was interpreted as a significant lack of care or concern and resulted in negative evaluations of the organization’s response;

“I understand that it was a stressful time for everyone, but I expected, well at least a phone call to make sure I was alive...I mean, I could have been stuck somewhere or anything. They did get round to it eventually...3 days after, was that Friday? Well, about 3 days after I got a call from HR to see if I was OK. I thought this was a bit late really”

For employees who had to remain at work, the immediate need was to contact their loved ones. The ability to ensure the safety of family members significantly determined their own emotional state and their capacity to concentrate on work.

“We had a process within my family where my kids and my wife assumed I’m fine and they just texted me to tell me that they’re fine and they’re okay and then I can get on with 150 percent focused on here - and so, within minutes of the earthquake in February, I got texts from my son and wife to say that they were okay. My wife was going to get to the kids – it wasn’t an issue for me, I could just throw myself 100 percent into the role here.”

This need for communication also continued through the following months as the ongoing aftershocks and psychological stress meant that employees regularly

needed to check the well-being of significant others. Employers needed to be flexible in this area:

“First and foremost, your own wellbeing and that of your family needs to come first and I’m not aware of any situation where the company imposed or rode roughshod over that.”

The basic needs of water, food, and shelter were central. Severe damage to the infrastructure meant that water and food supplies ceased and organisations were dependent on whatever reserves they had. For essential-service organisations with staff working through the initial crisis period, a key lesson was the need to provide food for their employees:

“one of the key things out of September is that you’ve got to feed people. So in September we survived on peanut slabs and packets of chips that we’d raided out of the social club cupboard in the [building]. In February, the very first thing I did when I walked in as Incident Controller was say to the [section] guys, “Go over and check the [building], also bring back all the food and drink you can find – put it in buckets, I don’t care – put it in rubbish bins – bring it all back.”

As a result, the organisation recognised the need to have emergency food available for any other disaster:

“Out of February, we learned when we debriefed, was that we have emergency rations of food over there you know pastas and spaghettis and sausages in the freezer and stuff like that you know sort of good carbs sort of thing to load them up on and in the snow that proved absolutely essential.”

Finally, as employees began to return to work their psychological safety took center stage. For example, employees wanted assurance that buildings were safe and to have procedures for aftershocks, and this shaped employees’ readiness to return to work:

“Yes, because they had had the Structural Engineers to say that this building was okay. It shook – yeah, but it’s held up. We knew where we could go each time we had the drill. We [the organization] put a process in place where we had a board and if anybody went out of the branch they had to put their name up, so we knew where everybody

was...everybody was allowed to carry their mobiles and if they wanted to have their handbags under their desks they could, so therefore if we had to evacuate they could grab everything when they are ready to go – yeah, so we just relaxed those rules just to make sure that everybody when anything happened, that they had everything at their fingertips and they could just go.”

(ii) The Changing and Relative Nature of Needs

The effects of the disaster varied widely across the population. In terms of spatial location, the eastern suburbs of the city were more severely affected than the west, and even at the street-level, some houses in a street suffered extensive damage while others were unaffected. Personal differences in how individuals reacted to the same situation further exacerbated this variation. Such uneven and unequal effects of the disaster had significant implications for identifying and addressing individuals' needs.

In some instances, organisations found it particularly difficult to make accurate assessments as employees did not fully report their situation:

“we found out that some people’s houses were absolutely destroyed and they didn’t tell us for two or three days you know, even though we had been talking to them and they wouldn’t tell us, because they didn’t think it was as bad as someone else’s place.

“by that late afternoon the news came through that her place was completely uninhabitable. She was doing her job and didn’t tell us – didn’t think it was as bad as other people.”

Two factors drove this behaviour. First, employees assessed their own level of need in relation to the needs of their colleagues. Initially, people compared their situation with others who were more severely affected and so tended to forego their own needs. Their willingness to accept offers of support from the organization was dependent on this assessment of relative need:

“There’s a lady here from [section] who died in Cashel Mall and I had a friend of mine who died in CTV Building, so you know it’s hard to sit and

feel sorry for yourself when you realize that you're not the worst off. There's always someone else that you find you know worse off than you ---"

"These guys [the organization] seemed to help out where they could and the offering of assistance was there even though I refused to take it because other people were worse off."

Significantly though, if management were not aware of this dynamic, it could lead to major misunderstandings concerning employee needs. The fact that some support services were less frequently utilised did not mean that the assistance was not noticed or appreciated. Employees still expected organisations to offer assistance, even though at a certain time this was often only accepted by a minority of employees. Some organisations used statistics concerning the utilization-rates of the differing types of assistance, in the misguided belief that this provided an indicator of whether those supports should be continued. This approach however, did not take into account the fact that employees' placed great value on simply having the assistance available. Low utilization-rates could instead indicate that, in those early stages, employees were very aware others were in greater need.

A second reason was that individual perceptions of reality were distorted immediately after the disaster. Using the worst-affected homes as a criterion, people whose houses were damaged but still standing felt that they were fine, and in a severely damaged city to have running water was a luxury, creating a skewed sense of normal:

"I just treated my house like a tent and camping. It's the only way to look at it. When you start thinking about what I want, what I need, they're two completely different things. I mean the most (important) thing is water and food to survive really isn't it?"

"It's great to be home. It's slightly inconvenient because we don't have a front door anymore and we're on a hill so we have to go through bedrooms to get into the house which is a pain and the house is kind of odd, spread over three levels. We can't get access to the middle level so we have to either go right down to the bottom or right at the top. We can't go in the middle. Well, hopefully, it looks like we'll be there for a

period longer as it stands. We're trying to take steps to create a bridge or some structure to get us into the front door."

With the passage of time however, the perceived hierarchy of individual needs gradually changed. Immediately following the earthquake, the small group of people who had lost loved ones were perceived to be the most in need. After that initial crisis period, as the media attention shifted from the fatalities, the workers' perceptions of needs also changed and the people who had lost their homes came to be seen as the most in need. This grouping involved a far greater number of people than those who suffered bereavement. Further changes occurred after this. Once basic infrastructure was sorted, the focus moved to those who were battling insurance companies, those needing major repairs to their house, and those who weren't coping with the aftershocks; again, this involved increasingly large numbers of employees. With each change, the contrast between those perceived as most in need and other employees became less marked. Different assessments of equity began to emerge. Issues of equity and fairness arose when other employees in similar situations did not receive the supports given to a specific group that was seen as needy. Those issues were expressed in relation to issues such as taking time off to look after children, 'stress days', or time granted for dealing with earthquake-related agencies; these were situations that confronted most employees rather than just a small subgroup. Gradually, employees whose lives were less dramatically affected by the disaster began to exhibit less tolerance for accommodating the needs of others who were still dealing with high levels of practical and emotional post-disaster recovery issues. The less affected employees changed their stance and desired attention for their own needs.

(iii) Time-Related Changes in Well-Being

Employees in the study experienced a trajectory of evolving needs. In the initial phase, there was a high level of energy with employees often wanting to assist and feel they were contributing to the recovery, or to provide a sense of normality among the chaos at home. Levels of engagement were therefore relatively high.

"So I guess it was an element of people operating on adrenalin for a period. You just focus on the things that you can fix, do something

about, and trust that when the time comes that those other things that are going on will be fixed or you'll receive help."

"I think morale is higher than it's ever been. The engagements are higher than it's ever been. The visibility of possibly what everybody is in the organization is a lot higher. The sense of security around leadership and roles and what I do and how I make a difference and that sort of stuff I think, that's high; a sense of purpose is high; a sense of understanding what collective power and strength you have is high."

As the focus moved from the crisis phase to the longer term recovery however, this initial willingness faded.

There were challenges in gauging the evolving needs of employees, and managers differed in the extent to which they were aware of these. Managers referred to the unanswered question of when their organisations would reach, or had reached, 'business-as-usual'. Eight months after the 2011 earthquake, some managers perceived that the situation was returning to 'normal', but many employees did not share this view and were still struggling with a range of ongoing issues. Workers involved in the immediate rebuild efforts, including emergency services, demolition crews, local authority staff, infrastructure workers and trades people, were vulnerable to burnout and their engagement began to decline (Quarantelli 1988).

The disaster produced increased demands both at home and at work. In the organisations studied, almost all employees worked extra hours with fewer resources and experienced a higher workload than normal. In service industries, there were added pressures from dealing with heightened customer stress levels. At the same time, a range of new pressures outside of work created more stress. Employees recounted having to provide childcare while schools were closed, relocating to other homes, having prolonged and acrimonious negotiations with insurers, and needing to care for extended family:

"People are just fundamentally under a lot of stress and strain, both work and at home, so that'll just be part of the holistic impact."

"So there was more pressure I guess afterwards to try and make up time and we had a very crazy, crazy time from February through to the end of April when we opened the [site]. We were working incredibly long hours"

"I think you've got to be able to let everybody recover at their own rate and be patient and flexible I guess. I felt the company wasn't flexible enough for some people. But certainly for the people in my team, because I knew what they had been through, I felt that I could be a lot more flexible."

While managers were keen to shift their attention back to business issues, employees suggested that this change began to overlook their ongoing needs and wellbeing, particularly in the long-term recovery;

"... [the organization] offered a lot of assistance straight after the event on the day...it was later on you needed that help to come and do stuff."

Providing assistance for employees to address outside-of-work demands, on its own did not necessarily address the overall situation confronting employees. For example, giving employees time off to deal with their own disaster-related issues could compound work problems when this was not linked with a process that also managed work demands; separate initiatives needed to be incorporated into a more comprehensive package for addressing employees' situations:

"So although you're having the time to deal with what you have to deal with at home, when you come back to work, no one has been doing your job so you're just flat out."

(iv) The Leadership Behaviour of Supervisors

Employees gauged their experience of the organisation's response in terms of how they were personally treated. Senior management teams generally desired to express their support for employees and provide tangible support but this did not always eventuate. The immediate supervisor mediated the relationship between senior management and employees, colouring the employees' perceptions of the organization's support.

The immediate supervisor acted as an information gatekeeper. The information flow operated in two directions. Senior management trusted supervisors to convey their concern and other messages to staff. Supervisors were also depended on for their ability to assess individual employees' needs, provide emotional support, and convey information about the workers and their needs back to management. Employees however highlighted the wide variation that occurred in the extent to which

supervisors fulfilled this role, and at times filtered or failed to convey information. One participant for example, spoke at length of what she perceived to be unequal treatment among different groups of employees within the same organization, resulting from a failure to inform employees of supports that were available:

“I basically found out because my best friend works down there, so she was like, “Well, I can have a shower at work after the gym,” rather than coming back here when she was staying here and all that sort of stuff. And I just recently found out that yeah, one of the other girls...she was showering at work and doing all her washing and stuff like that. We didn’t even know that this sort of stuff was available...”

The influence of the immediate supervisor and the variations in communication and support, even within the same company, were evident in a range of areas:

“I’d say depending on your manager – yeah, I think yeah, you could, ‘Hey, I just really need a day to you know to do nothing or whatever.’ Yeah, I think some managers would have just said, ‘Yeah, not a problem’ But yeah, we always sort of tended to – it had to be – well, I mean the ones that I had there was a reason, but I was still fighting tooth and nail to get it.”

Perceived inconsistencies regarding the level of support contributed to feelings of inequity and created negative evaluations of the organization. There was a difficult balance between being flexible enough to respond to individual needs, while also having sufficiently structured provisions to be transparent and equitable. While senior management and human resources staff created the guidelines for accessing support, the immediate supervisor was ultimately the agent who interpreted and applied those guidelines.

Contrasting styles of supervisory support were immediately noticed, such as when a supervisor with valued interpersonal skills was replaced:

“We were basically left with nobody. So we had no direction - no one...he just wasn’t a person to – like you couldn’t go in and just sit with him and say, ‘Hey, look I’m just really down and scared and you know could just do with a day off just to get my head right and la-la-la.’ Whereas, there are other people in the branch that yes, definitely, you

could do that with or other branch managers out there that I've worked with in the past, where you'd have no problem bursting into tears."

In tandem with this there was variation in the extent to which senior decision-makers set the tone for assessing and addressing individual needs. In some organisations, this support extended beyond the employees to their families:

"...the CEO, basically said, 'You do whatever it takes to look after the people, right.' So organizing toilets for the people that didn't have them you know, portable toilets and we sent plumbers out. We sent electricians out to make sure you know if people had burst water pipes and stuff."

Discussion

A disaster is overwhelming for individuals as it exceeds their adaptive capacities, creating a misfit between the environmental demands and their own abilities and needs (French, Rogers, & Cobb, 1981). At the same time, organisations are forced to adapt in order to maintain or resume their functioning and, to do this, they are dependent upon having employees who have the ability and motivation to continue working. This creates a radically new situation where the usual elements of human resources management - employee needs, organisational goals and practices - must be significantly redefined, and in which the conventional expressions of equity and standardisation have to take on new forms. Three key principles emerge in addressing this situation; these are perceived organizational support, organizational justice and work engagement.

Work engagement is a crucial element in organisational recovery and is defined as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Bakker and Demerouti 2008). Engaged workers tend to be more productive as they are more committed, exhibit organizational citizenship behaviours, and are less likely to quit (Bakker and Demerouti 2008; Saks 2006). Several job and personal factors contribute to work engagement. Among the job factors, perceived organizational support, that is, the extent to which employees perceive that the organisation supports and assists them, is a major influence. In a disaster situation, the extent to which individuals perceive they are supported by the organisation strongly influences ongoing work engagement. .

The findings provide new insights into how employees' perceptions of organizational support influence work engagement following a disaster. In this context, individuals are characterized by a needs trajectory with needs changing over time as the implications of the disaster begin to unfold and new challenges emerge. At the same time, variations in the extent to which individuals are affected by the disaster means that the less-affected staff are reluctant to articulate the needs they do have. These needs are likely to surface later and give rise to muted dissatisfaction if they are not identified and addressed. The pivotal issue is the extent to which organisations are sensitive to these evolving and unarticulated needs, as this determines whether the interactions with the employee will impact negatively or positively on work engagement and organizational recovery.

The pivotal role of supervisors in relation to employee well-being, mediating employee perceptions of organizational sensitivity and support, is in line with the other research concerning the key role of middle managers in the performance of knowledge-intensive organisations (Boyatzis et al. 2000; Mollick 2011). The social and emotional awareness of middle managers influences employee perceptions of organizational support, which is an important antecedent in work engagement. Figure 1 shows the relationship between employee needs and work engagement.

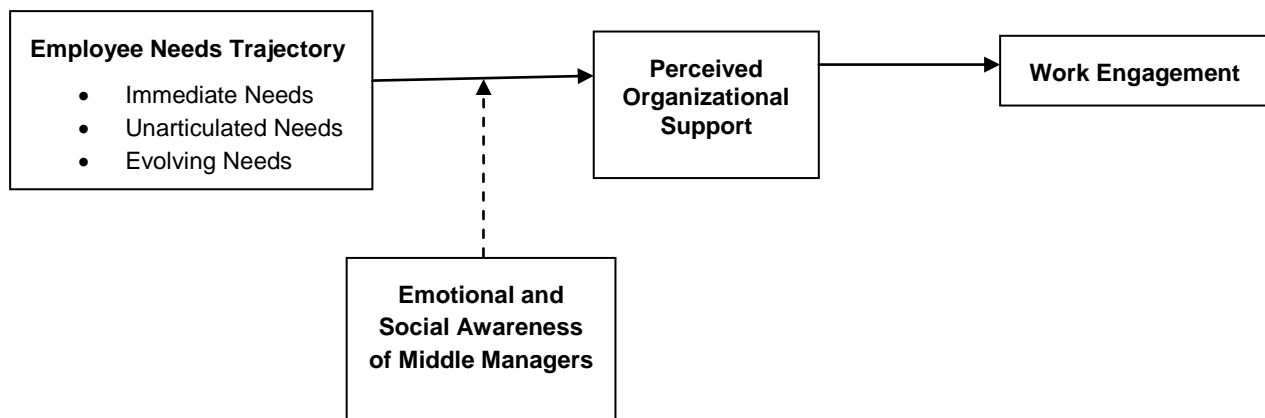


Figure 1: Relationship between Employee Needs Trajectory and Work Engagement

Alongside this, the concept of organizational justice, concerning individual and collectively shared perceptions of fairness, also supports this perspective of work engagement, specifically the area of organizational engagement (Colquitt et al. 2001; Saks 2006). Management actions that are perceived as fair and equitable foster

engagement, however perceived inequities will reduce work engagement. Distributive justice refers to perceptions of fairness related to what someone receives; procedural justice refers to the perceived fairness of the process of allocating resources, while interactional justice refers to the quality of interpersonal treatment employees receive when procedures are implemented and resources are allocated (Bies and Moag 1986). After a disaster, attending to immediate and evolving needs involves distributive justice in terms of the support received; procedural justice concerns the apparent equity and fairness of the decision processes, while the supervisor's interpersonal skills and empathy contribute to interactional justice. In a post-disaster situation all three forms of justice take on heightened importance as the organisation is experiencing a unique situation without previously established precedents and procedures. Employees are acutely aware of, and closely monitor, all three forms of justice and the extent to which management address justice matters will impact levels of employee work engagement.

Practical Implications

These findings have implications for the practice of human resource management in a post-disaster environment. No two disasters are identical and the range of possible types of disasters or crises means that it is impossible to create pre-written procedures to cover all contingencies. Instead this research has sought to define a set of dynamics and processes that are sufficiently flexible to be applied across a wide range of situations, and that can also continue to adapt through the various stages of a disaster.

In large organisations, conventional human resource practices are strongly anchored in principles of distributive and procedural justice. Under normal circumstances this is achieved through uniformity and standardisation of policies and procedures. This bureaucratic orientation ensures efficiency, consistency and equity. However, in a post-disaster context, this approach could negatively affect work engagement as employees' needs vary, both across individuals and over time. Instead there is a need for adaptable, responsive human resource practices that are sensitive to the diverse needs across individuals, and also the changes occurring over time. Communication channels are required and these must be able to provide clear and regularly updated information about the nature of individual employees' needs, in order to allow management to create supports and work systems that are directly tailored to employees' situations, both at work and outside of work. Those supports

must be part of a comprehensive package that takes into account the work and non-work stressors and supports. Supervisors who have the ability to identify and report needs are vital in these communication channels.

The immediate supervisor also plays a critical role in ensuring work engagement through their social skills, particularly empathy, as this directly affects the extent to which an employee perceives they have received interactional justice. This suggests a need to specifically target and train middle managers in emotional intelligence capabilities, as well as monitoring their performance in a disaster, in order to ensure effective organizational recovery (Boyatzis et al. 2000).

These findings also offer a number of other practical implications for organisations in managing employee needs following a major disaster. For example, regularly updating employee contact lists, having well-rehearsed emergency evacuation plans that are suitable for all disasters, and up skilling supervisors with interpersonal skills and experience in simulated disasters, are all preparatory measures that can be utilised to better equip organisations for real disaster situations. This then allows organisations to enter into disaster management in such a way that they can focus on developing employee supports and sustainable work system, ensuring that support and assistance extends beyond the immediate timeframe of the disaster, and providing employees with practical assistance for their evolving needs.

Conclusion

Traditional notions of a disaster plan have usually implied a set of pre-written procedures focused on handling the initial short-term crisis. This approach however, gives comparatively little attention to the essential, but often overlooked ongoing needs for longer term management after that stage. Our study highlights instead the need for a dynamic, ongoing management process for both the initial crisis and continuing through the longer term recovery. The data collected from organisations following a major disaster highlight the need to attend to four key themes: (a) addressing basic human needs, (b) the changing and relative nature of needs, (c) time-related changes in well-being, and (d) the leadership behaviour of supervisors.

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